DEPARTMENT OF ECOLOGY
State of Washington

NW-5004

Section 2.2
Capital Budget Grant Request Form
Watershed Plan Implementation and Flow Achievement

Project Title: Central Whidbey Aquifer Storage and Retrieval Feasibility Study

County: Island

WRIA: 6

If more space is needed attach additional sheets

1. Applicant Information

Applicant name Town of Coupeville	**Phone no.** (360) 678-4461	**Fax no.** (360) 678-3299
Address PO Box 725		
City Coupeville	**State** WA	**Zip code** 98239
Email address portergroup@whidbey.net		
Water right holder name (If applicable and if other than applicant)	**Phone Number** ( )	**Fax Number** ( )
Mailing address		
City	**State**	**Zip code**

2. Project Location

Project name Central Whidbey Aquifer Storage and Retrieval Feasibility Study
Project location Town of Coupeville, Central Whidbey Island
Stream reach mile or location Central Whidbey Island

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3. Project Type and Description

(Check all that apply)

Conservation and/or infrastructure improvement (pumps and pipes)	☐
Water storage feasibility study	X
Water exchange or water right acquisition	☐

Please describe your project in detail

Introduction:
This aquifer storage and retrieval feasibility study creates water reuse flow quantities for the designated water short area of Central Whidbey Island. Additionally, the project will lead to the elimination of waste water and/or contaminated storm water releases into threatened Penn Cove, a 303(d) listed water body and Admiralty Inlet.

This project is explicitly recommended in Island County's Water Resource Management Plan (2005) under High Priority Recommendation #4F which calls for: "Utilize reclaimed water for non-potable uses: Outdoor irrigation, groundwater recharge." The project is highly beneficial to:

- Central Whidbey farmers
- Commercial and recreational shellfish harvesters
- Tribal governments
- Salmon recovery interests of Puget Sound
- Recreational users of Penn Cove
- Puget Sound Partnership Action Agenda
- General citizens

This will be accomplished by:

1) Assessing the technical feasibility of infiltration, water reuse and/or groundwater recharge as a means for managing Class A treated wastewater and/or stormwater
2) Identifying additional treatment requirements above and beyond Class A, if any,
3) Developing a concept and estimated cost for managing the water using groundwater recharge, storage and/or retrieval and
4) Drafting permit applications land application of effluent, and other water reuse sources and
5) Providing all other permitting support for the project.

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Commitment to an Approved Watershed Plan and Planning Obligation

This project is supported by the North Whidbey Island Watershed Non-Point Pollution (NPP) Prevention Plan, the Island County Water Resource Management Plan and the Island County Water Quality Data and Synthesis Report. The project will eliminate one or more outfalls and flow insufficiencies documented in the North Whidbey Watershed NPP Plan and other documents.

Specifically, this project is outlined in Island County's Water Resource Management Plan (WRMP). The WRMP was approved of in 2005 and its' related Detailed Implementation Plan (DIP) became official in 2006. The WRMP, under High Priority Recommendation #4F, calls for: "Utilize reclaimed water for non-potable uses: Outdoor irrigation, groundwater recharge." Additionally, this project request which retains water for a water short area and eliminates non-point surface water discharge of pollutants into a 303(d) listed water body (Penn Cove) provides local agencies, and the local watershed planning unit, an opportunity to implement WRMP obligations. This project is of particular importance since Whidbey Island is an EPA designated 'sole source aquifer' area. Additionally, the WRIA 6 Water Resource Management Plan and the Detailed Implementation Plan actions include high priority recommendations consistent with this project. This is critical on Whidbey Island as WRIA 6 is designated as a sole source aquifer by the US EPA.

The newly adopted Puget Sound Partnership Action Agenda directly support a feasibility assessment of this type. One of the top key strategies in the Whidbey Action Area focuses on protecting habitat in near shore areas, minimizing non-point pollutants entering the Puget Sound and management of stormwater. A specific priority action is to reduce sources of contaminated non-point pollution being discharged directly into Penn Cove and Admiralty Inlet.

High Benefits to Water Supply, Water Quality and Habitat Management Objectives

This project is required due to the ecological benefits resulting from eliminating poor water quality inputs into Penn Cove and reusing the water for aquifer recharge and/or irrigation. First, Central Whidbey Island is one of the driest areas of western Washington. The 2005 Island County Water Resource Management Plan (WRMP) states that all Island County's groundwater aquifers are recharged only by rainfall infiltration. Due to the rain-shadow effect of the Olympic Peninsula Mountains Washington State University data documents annual total rainfall average of 18 to 20 inches on Central Whidbey. Island County is a 'sole source aquifer' which is a status conferred by the US EPA in 1982. Whidbey Island's low annual rainfall together with aquifer status reflects the high susceptibility of aquifer limitations. Island County's WRMP depicts the site area for this proposal as characterized by Very Low and Low water level elevations which reflects the low shoreline pressures. The plan also demonstrates that the project area is at high risk of susceptibility to seawater contamination according to Critical Aquifer Recharge Area mapping. Finally, as noted in the plan's instream flow section – the health of water resources depends on factors in addition to stream flows – such as water quality and storm and waste water flow re-routing which are at the heart of this feasibility assessment. Due to aquifer status and risk of salt water intrusion the study of local aquifer storage and retrieval is imperative.

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The Town of Coupeville, in conjunction with the Whidbey Island Conservation District, Island County Health Department and other partners will support the conduct of this aquifer storage and retrieval feasibility assessment in order to reduce untreated stormwater outfall into Penn Cove, a 303(d) listed water body and Admiralty Inlet. This will result in the protection of shellfish habitat and endangered salmon habitat in Penn Cove. This project will provide for stormwater and/or waste water effluent to be managed without direct discharge into the Puget Sound. Currently, all of the Town of Coupeville stormwater from this surface flows to direct, untreated release into Penn Cove and Admiralty Inlet. The same is true for all Class B waste water from the Town of Coupeville. The water quality benefit will be derived from eliminating pollutants from heavily used Town use being discharged into Penn Cove as well as the Central Whidbey Ebey's Prairie conveyance of large amounts of stormwaters into Admiralty Inlet which discharge at a single outfall. The partners in this project – the Town of Coupeville, the National Park Services Ebey's Landing Historical Reserve, Whidbey Island Conservation District and Island County Public Health are fully committed to this project.

All potential water reuse sources are hydrologically connected to Penn Cove, a 303(d) listed water body or Admiralty Inlet. Penn Cove is currently listed on DOH's 2006 Early Warning System Threatened List. The Washington State Department of Ecology estimates that about one-third of all polluted waters on the 303(d) list are degraded because of stormwater runoff. Additionally, Penn Cove waters were documented in the U.S. Department of Interior's Assessment of Coastal Water Resources and Watershed Conditions of 2007 as having exiting nutrient, dissolved oxygen and fecal bacteria water quality problems. The proposed feasibility assessment water reuse eliminates a significant source of contamination from entering Penn Cove. It will also lead to the removal of an unnatural hydrologic connection from the Town of Coupeville to Penn Cove and replace it with more natural recharge or reuse conditions. The same is true on the south side of Central Whidbey where large amounts of stormwaters are conveyed into Admiralty Inlet with known water quality exceedences.

This project will generate the following ecosystem benefits: elimination of a significant contamination source to a direct discharge outfall, upgrade in Penn Cove and Admiralty Inlet water quality for ESA listed Chinook salmon and decrease in pollution discharge in already prohibited and conditionally approved shellfish harvest areas. Specifically, the first benefit comes from elimination of a hydrologic connection to an outfall which will provide immediate ecosystem function improvement. Secondly, the proposed stormwater outfall reduction will provide an upgrade to water quality for endangered species using Penn Cove habitats. Chinook salmon are ESA listed specie that has been shown to use Penn Cove's estuarine habitat areas. The 2006 Skagit River System Cooperative Habitat and Fish Use of Pocket Estuaries in the Whidbey Basin Report document the use of Penn Cove's Grassers lagoon as a location for Chinook use as well as related forage fish. Similarly, the Washington State DFW 1999 Spawning Area Analysis for Forage Fish also documented spawning areas in multiple Penn Cove locations including at the Coupeville nearshore. Elimination of untreated storm water will improve habitat conditions. The Limiting Factors Analysis (LFA) for WRIA 6 (Conservation Commission 2000) states that Whidbey Island has historically supported a number of estuaries and other nearshore ecosystems that are important resources for maintaining salmon stocks. Further, nearshore habitats are Island County's major contribution to salmon productivity within the Puget Sound region. The LFA further states that low dissolved oxygen is one of two primary concerns for water quality degradation within WRIA 6. Coupeville's adjoining water body, Penn Cove, is listed on DOE's 303(d) list due to

dissolved oxygen. Additionally, the LFA states that nearshore area of WRIA 6 and related shellfish growing areas are increasingly threatened by low dissolved oxygen concentrations. The Puget Sound Partnership Action Agenda states that "Penn Cove is one of four of the regions third-highest problem area for low levels of dissolved oxygen in Puget Sound after Hood Canal and south Puget Sound." Finally, the project will substantially decrease discharges of pollutants into Penn Cove where currently all shellfish growing areas are designated as prohibited or conditionally approved by the State.

Further, the North Whidbey Watershed Prevention Plan, based on criteria established in WAC 400-12, supports this project. The Plan ranks Penn Cove 2nd of all watersheds for potential to contribute into the Puget Sound. The monitoring station for stormwater quality in Coupeville rated the water quality as poor due to excess turbidity, elevated metals, fecal, and hydrocarbons. Additionally, in terms of action plan steps, Coupeville was ranked 2nd for needing annual stormwater structure inspections, and Penn Cove ranked 1st for watershed/natural resources protection actions.

In July 2007, Island County Public Health adopted new code which requires septic system owners to inspect their system regularly. Sensitive Areas satisfy code requirement for jurisdictions to identify area where on-site sewage disposal system could pose and increased risk to public health. The Sensitive Area designation was adopted by Island County and approved by the State as the most restricted area in the County. Penn Cove was one of two locations to merit this most protected status.

Support, Leverage and Match with other Ecology Projects

Partnerships on this project include the Whidbey Island Conservation District, Island County's Health, and Planning Departments, Ebey's Landing National Historic Reserve, Island County's Water Resource Advisory Committee (WRIA's 6 local watershed planning unit), as well as Island County's Marine Resource Committee. Agreements in place include matching resource commitments from the Town of Coupeville and Island County Health Department. The project is being matched by over 10% of local resources which demonstrate commitment to the project. These investments demonstrate community and project team commitment to start the project immediately and follow through for the long term. Project partners and matching contributors share common values and vision for a healthier Penn Cove, Admiralty Inlet and water re-use on water short Ebey's Prairie.

Further, the project leverages ongoing Town of Coupeville water quantity resource projects. Currently the Town is conducting two DOE projects that focus on maximizing water quantities for the community through innovative and improved use of effluent and stormwater from Penn Cove and Admiralty Inlet. The Town's knowledge of Ecology resources, priorities and procedures will be leveraged to maximum effect during the implementation of this feasiblity study. The Town of Coupeville and Island County's Health Department will be providing matching resources in the form of cash funding and in-kind staff support. Further, the local conservation district and other Island County departments will be indirectly supporting the project through ongoing, local watershed planning, water quantity and other water reuse committees.

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Readiness to Proceed Immediately

The Town of Coupeville is ready to proceed with this aquifer storage and retrieval feasibility study as soon as a grant agreement is signed—as early as July 1, 2009. The Town of Coupeville is currently managing two, concurrent Department of Ecology grants related to stormwater activities and water re-use. The on-going and successful project management of DOE resources is the single best indicator current readiness to proceed with this new DOE project. The Town knows the funding and reporting processes needed to manage a project of this scope and has a ready-made network of DOE and other technical advisors in this area of study. Few communities in Washington State have as well integrated team of water quantity players as does WRIA 6 and particularly Central Whidbey Island.

Investments of time and money have been made in the local area to become ready to implement this project. The project is fully consistent with Island County's Watershed Management Plan. The Town of Coupeville discussed this type of project in the past year at Reclaimed Water Steering Committee meetings. It has been reported in the local press and has been reviewed during other local public forums. The project team has also made use of the local review process by participating in the Whidbey Island Conservation District hosted Low Impact Development Summits of 2007. The project was presented and discussed at Island County's Marine Resource Committee meetings in 2008. Finally, this project was also presented, discussed and approved unanimously at a recent Island County's Water Resources Advisory Committee meeting.

High Likelihood of Success

This aquifer storage and retrieval feasibility assessment project has a high likelihood of success. It is low risk because it has been well thought-out, is fully consistent with the local planning objectives and was unanimously supported by the Island County's Water Resources Advisory Committee, WRIA's 6 local watershed planning unit. This project will succeed due to the local community having an existing watershed plan and current proactive efforts to reduce non-point pollutants entering Penn Cove and Admiralty Inlet through storm water discharge.

Additionally, the Town of Coupeville is currently managing two, concurrent Department of Ecology grants related to stormwater activities and water re-use. The on-going and successful project management of DOE resources is the single best indicator of future success. In the past two years the Town of Coupeville has researched, applied for and is successfully managing several challenging DOE grants and is ready to do the same high quality work on this project. From the Town of Coupeville, to Island County Planning and Health and Public Works Departments, to WSU Extension Office and Whidbey Island Conservation District and Ebey's Landing National Historical Reserve, the team supports creating suitable volumes of usable reclaimed waters is high priority joint effort.

Project Summary

This project will lead to a fully implemented reclaimed water project requiring a wastewater discharge permit. Reclaimed water projects are administered jointly by the State Departments of Ecology and Health. Land application (irrigation and groundwater recharge) of reclaimed water is permitted by

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Ecology in RCW 90.46.040 in accordance with WAC 173-240 (Ecology) and WAC 246-271 and WAC 246-290 (Health) and are being revised. An assessment of treatment and treatment reliability, reclaimed water quality and quantity, use or potential use of the groundwater, operation and management of the recharge facilities, soil characteristics, hydrogeology, residence time of the reclaimed water in the underground prior to withdrawal, and distance from the recharge area to nearest point of withdrawal (e.g., water supply wells) will be provided

The basic water quality requirement in RCW 90.46.080 is that the reclaimed water must meet the contaminant criteria found in the drinking water quality standards (maximum contaminant levels) as measured in ground water beneath or down-gradient of the recharge project site. In general the project will address the following:

(1) Reclaimed water must comply with or exceed standards for Class A reclaimed water, including appropriate chlorination treatment (CT) values for the disinfection process.
(2) Treatment process must include appropriate treatment to reduce the nitrogen content in the final reclaimed water to the level required by the ground water recharge criteria.
(3) An approved pretreatment program must be adopted (either locally or in conjunction with Ecology). The sewer utility's implementation policies and practices must be described.
(4) Document background/natural ground water quality including bacteria, physical and inorganic chemicals, organic chemicals, and radionuclides.
(5) Verify compliance with drinking water quality criteria as measured in ground water beneath or down-gradient of the recharge project site for the new mixture of ground water and reclaimed water. Discuss ability of soil and aquifer materials and processes to provide a safe, potable ground water; the fate of residual pollutants from the reclaimed water while in residence within the unsaturated zone and the aquifer; and hydraulic residence time for reclaimed water in the unsaturated zone and the aquifer before extraction by nearby water supply wells and/or discharge to nearby surface waters.
(6) Discuss additional water quality monitoring for constituents found in reclaimed water for which drinking water criteria have not been established. Identify recommended sampling locations within the treatment and conveyance facilities and from monitoring wells.
(7) For nearby surface waters in hydraulic continuity with ground water, discuss surface water quality impacts of surface discharges from the aquifer.
(8) Discuss water quality impacts of recharged ground water on areas of seawater intrusion, ground water contamination, or other degraded ground water quality.

Conclusion

This project provides large water quantity, water quality and habitat benefits. It is specifically called for by county commissioner approved planning documents. Further, this feasibility assessment project is low risk, is supported by numerous local partners and is being matched with local resources. Few capital project feasibility studies can achieve similar watershed planning implementation and flow achievements with fewer dollars and lower risk. The Town of Coupeville is poised to implement as soon as possible.

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Use this box to make any other comments regarding the project and water rights involved

The Department may require the Recipient to declare whether it intends to retain exclusive rights to the infiltrated water retained from current discharge into Penn Cove and Admiralty Inlet. These rights may be conveyed to the Town of Coupeville or Island County. The quantity of retained rights will be negotiated with Ecology.

Describe the project by task (statement of work)

The following sections present the scope of work for the project:

Task 1 – Project Administration/Management

A. The RECIPIENT will administer and manage the project. Responsibilities will include, but not be limited to: maintenance of project records; submittal of payment vouchers, fiscal forms, and progress reports; compliance with applicable procurement and interlocal agreement requirements; attainment of all required permits, licenses, easements, or property rights necessary for the project; conducting, coordinating, and scheduling of all project activities; quality control; and submittal of required performance items.

B. The RECIPIENT will ensure that every effort is made to maintain effective communication with the RECIPIENT's designees, the DEPARTMENT, all affected local, state, or federal jurisdictions, and any interested individuals or groups. The RECIPIENT will carry out this project in accordance with completion dates outlined in this Agreement.

C. The RECIPIENT shall submit all invoice requests and supportive documentation to the Financial Manager of the DEPARTMENT.

Required Performance:

1. Effective administration and management of this grant project.
2. Maintenance of all project records.
3. Submittal of all required performance items, including the Post Project Assessment Plan, progress reports, financial vouchers, and maintenance of all project records.

Total Task Cost $14,000

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Task 2 – Characterize Site Conditions

A. The RECIPIENT will characterize soils, geology, and groundwater conditions at the site. Activities will include the following:

- Meet with Department of Ecology and Health to discuss the project concept and identify project concerns, issues, and data needs.
- Review the existing geotechnical reports. Compile available well logs and information on site soils, geology, groundwater conditions, reclaimed water quality, and native groundwater quality.
- Prepare a topographic base map, geologic map, and geologic cross sections.
- Compile available background groundwater quality data (e.g., local wells).
- To the extent available data allow, estimate ground water elevations, estimate groundwater flow direction, and identify natural and pumping induced water level fluctuations.
- Identify hydrologic/hydraulic features including groundwater recharge areas, streams, springs, wells, and other discharge areas, such as leakage to other aquifers.
- Prepare a preliminary water balance that includes recharge, groundwater base-flow, discharge, precipitation, evapotranspiration, runoff, base flow, and natural fluctuations.
- For the proposed recharge area, estimate the thickness and hydraulic characteristics of the sediments overlying bedrock. Estimate soil infiltration rate and rate of migration to the water table.
- Estimate aquifer hydraulic characteristics including hydraulic conductivity/permeability, transmissivity, storage coefficient, and groundwater flow velocity and direction.
- Calculate the height, elevation, and lateral dimensions of the ground water mound that will form beneath the land application/percolation area. Estimate water levels for pre-recharge conditions and predicted water levels for post-recharge conditions.
- Estimate the concentration of constituents in the reclaimed water after treatment.

B. The RECIPIENT shall submit all reports, maps and other documentation to the DEPARTMENT.

Required Performance:

1. Conduct all required analysis, mapping and reporting by October 1, 2009
2. Provide all site characterization documents by October 31, 2009

Total Task Cost $19,000

Task 3 – Assess Technical Feasibility of Aquifer Storage, Infiltration and Groundwater Recharge

A. The RECIPIENT will assess technical feasibility of aquifer storage, infiltration, and/or groundwater recharge, identify limiting factors, and identify methods to deal with limiting factors. Information developed under this task will be used in the permitting process. Activities will include the following:

- Estimate rate at which reclaimed water can percolate through surface soils in freezing and non-freezing conditions, identify limiting factors, and assess methods for addressing limiting factors.
- Compare reclaimed water quality and native groundwater quality. Identify constituents that are not naturally present in groundwater and constituents present in reclaimed water that are higher in concentration than in groundwater.
- Estimate travel time to the water table and to the nearest water supply well.
- Assess water quality changes during infiltration through soils and the unsaturated zone and estimate concentrations of key constituents (e.g., nitrate) at the water table and at the nearest downgradient well.
- For constituents exceeding regulatory standards or background concentrations, assess efficacy of additional treatment to reduce concentrations.
- Review hydraulic continuity between ground water and surface water. Calculate impacts of recharged ground water on surface base flows, if any.
- Prepare a map showing features that might be vulnerable to high pressures, including building foundations, buried tanks (septic tanks, fuel tanks), pipelines (water, sewer, gas, fuels), surface slopes, and deep excavations. Show soil and subsurface conditions near these features. Verify that changes in soil strength and slope stability will not jeopardize these features or likely cause other property damage.
- Review adequacy of existing data and whether new test wells and/or aquifer testing might be needed to provide an adequate hydrogeologic characterization of the project site.
- Meet with the Department of Ecology and Health to review findings and overall project feasibility.

B. The RECIPIENT shall submit all reports, maps and other documentation to the DEPARTMENT.

Required Performance:

1. Conduct all required analysis, mapping and reporting by December 15, 2009

2. Provide memorandum summarizing all findings, including recommendations by December 31, 2009

Total Task Cost $35,000

Task 4 - Treatment Requirements

A. The RECIPIENT will identify treatment, in addition to MBR, that will be needed to meet Department of Ecology and Health requirements in order for the reclaimed water to be used for storage, infiltration and/or groundwater recharge purposes. Findings from Tasks 2 and 3 and input from Ecology and Health will be considered in this analysis. Because reclaimed water will be land applied and infiltrated in the colder winter months when plant uptake and natural biological activity are diminished, we anticipate that additional treatment for nitrate and other nutrients will be needed. Likewise, there may be concentrations of other constituents present in the reclaimed water that could require additional treatment. This task will not be completed if the findings from Tasks 2 and 3 indicate that groundwater recharge is not a feasible and permittable method for managing winter-time reclaimed water.

B. The RECIPIENT shall submit memorandum and all other documentation to the DEPARTMENT.

Required Performance:

1. Conduct all required investigation on treatment needs and estimated costs by February 1, 2010
2. Provide memorandum summarizing all findings, including recommendations of additional treatment needs and estimated costs by February 15, 2010

Total Task Cost $17,000

Task 5 – Groundwater Concept and Estimated Cost

A. The RECIPIENT will, if the findings from Tasks 2 through 4 indicate that storage, infiltration and/or groundwater recharge is potentially viable, create and document a concept for the groundwater recharge project suitable for project permitting purposes will be developed that would include the following:

- Plan view map of project components for treatment, conveyance, and recharge relative to other site features.
- Cross section view showing project components.
- Narrative description of the project operation including estimated flow rates.
- Estimated cost for the infiltration system, including groundwater monitoring costs.

The Town will meet with the Department of Ecology and Health to review the project concept, make adjustments to the plan, and discuss permitting steps.

B. The RECIPIENT shall submit all reports, maps, cost estimates and other documentation to the

DEPARTMENT. Findings and drawings will be drafted as a section that will be inserted into the draft preliminary engineering report.

Required Performance:

1. Conduct all required mapping, drawings, description of system components, narrative of operation and costs estimates by May 1, 2010
2. Findings and drawings will be drafted as a section that will be inserted into the draft preliminary engineering report. Provide memorandum summarizing all findings May 31, 2010

Total Task Cost $41,000

Task 6 – Permitting and Support

A. The RECIPIENT will, if the results from the preceding tasks are favorable, proceed with preparing the required reclaimed water use permit application materials and a draft application. Technical documents prepared for this project will provide the needed supporting documentation.

B. The RECIPIENT shall submit permit application materials, draft application and other documentation to the DEPARTMENT.

Required Performance:

1. Prepare all required reclaimed water use permit application materials by June 15, 2010
2. Provide draft application using the project's technical documents prepared previously as needed supporting documentation by June 30, 2010

Total Task Cost $22,000

4. Project Budget

Project Budget:

$148,000 total, $132,460 requested from WA DOE and matching funds of $15,540 (equaling 10.5% of project budget, from in-kind sources).

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Total budget by project task or by expenditure

Task 1 – Project Administration and Management, $14,000

Task 2 – Characterize Site Conditions, $19,000

Task 3 – Assess Technical Feasibility of Aquifer Storage, Infiltration and Groundwater Recharge, $35,000

Task 4 – Treatment Requirements, 17,000

Task 5 – Groundwater Concept and Estimated Cost, 41,000

Task 6 – Permitting and Support, $22,000

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5. Funding Source Information

Total project amount expected to be provided by sources other than this program (dollar total and percent of project budget)
$15,540, equaling 10.5% of project budget

Identify sources and type of funding other than through this program grant. Include expected dates of participation. Include as an attachment; letters of commitment, offer letters, application approvals, etc.

Source and type of funding: In-kind staff support from Island County Health Department

Amount: $5760 in-kind match through staff time

Status: Letter of commitment attached

Dates of participation: Monthly in-kind support during the period of performance

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Source and type of funding: Town of Coupeville

Amount: $9780

Status: Town's signed application serves as formal notice of funding commitment

Dates of participation: Upon signing of grant agreement

Source and type of funding:

Amount:

Status:

Dates of participation:

Source and type of funding:

Amount:

Status:

Dates of participation:

Source and type of funding:

Amount:

Status:

Dates of participation:

Source and type of funding:

Amount:

Status:

Dates of participation:

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6. Instream Flow and other Instream Habitat Benefits

A. Water Right Information - Attach Water Right documents
(You may skip this section if this application is for Storage Feasibility Study funding)

Water right holder's name (if other than applicant)	Phone no: ( )	Fax no: ( )
Address		
City	State	Zip code
Complete legal description of the property attached to this water right:		
Water right number:		
Parcel number associated with this water right:		
Do you own the property proposed for this project? If not, please explain:		
If the grant applicant is not the water right holder, please explain the reason:		
Water source (Stream name).		

B. Water Usage

Has water been put to beneficial use in the past five years?

Yes ☐ No ☐ I don't know ☐

Describe that use in terms of the specific beneficial use during that period:

(Please attach any available documents that verify that use during the last five years. Include aerial photographs, power company records, flow meter records, crop type records, NRCS documentation or FSA records)

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Has beneficial use of this water ceased for a period of five or more years during any period since 1967? Yes ☐ No ☐
Please describe the beneficial use for the water quantified under the water right discussed above. Describe the following: purpose (examples: domestic, irrigation, municipal); system type; if irrigation, describe crop type.
Quantify as nearly as possible current water use: Instantaneous rate (QI) of use: CFS Annual rate (QA) of use ACRE- FEET
Historic beneficial use quantity of the water right (highest of the last 5 years/ irrigation seasons in instantaneous and annual quantities) _____ CFS _____ ACRE-FEET
If irrigation, how many acres are irrigated under this water right?
Are there other water rights associated with this specific water right?
In order to process this pre-application ecology requires the following information (include for the previous five years; please attach copies of all documents and maps) • Power data (contact local power utility for pump records, etc.) • Historical crop type data (contact local FSA office) • Flow meter records (contact local power utility) • Aerial photos (contact local FSA office)

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C. Estimated Total Water Savings

Infrastructure projects: Estimate the water to be conserved through this project. Provide engineering or technical analysis to support this estimate.

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOT
QA (ACRE-FEET)													
QI (CFS)													

D. Additional Instream Benefits

Describe other instream benefits envisioned as a result of funding this project:

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7. Resources currently committed to ensure long-term performance of the proposed project (operation and maintenance).

Who is responsible for long-term operation and maintenance of the project?
Town of Coupeville

Have operation and maintenance costs been identified? Yes ☐ No X

If yes, please describe: Operations and maintenance costs will be determined during the proposed

Not applicable since this is an ASR Feasibility Study request

Summarize these costs on an annual basis below:
To be determined.

Not applicable since this is an ASR Feasibility Study request

Are measurement devices other than diversion source meters necessary to monitor compliance with the project intent or plan? Yes ☐ No X
If yes, please describe:

Does a water measurement device exist on the source and downstream of the proposed project?
☐ yes X no

If no, will a water measurement device be installed as part of this project? Yes ☐ No X
If yes, describe location and operating entity:

If yes, provide the river mile:

What is the nearest stream gage downstream of the proposed project? Source name

National Park Service flow monitoring gage at Ebey's Prairie Ferry House location.

River mile : Not applicable

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8. Proponent's Readiness to Proceed

Describe status of feasibility reports, engineering design, and permits. Provide documentation for these deliverables and describe the project effort timeline as appropriate (submit two (2) copies of all required documents).

The Town of Coupeville is ready to proceed with this aquifer storage and retrieval feasibility study as soon as a grant agreement is signed. This aquifer storage and retrieval feasibility assessment project has a high likelihood of success. It is low risk because it has been well thought-out, is fully consistent with the local planning objectives and was unanimously supported by the Water Resources Advisory Committee, WRIA's 6 local watershed planning unit. This project is ready to proceed due to the local community having an existing watershed plan and current proactive efforts to reduce non-point pollutants entering Penn Cove through storm water discharge.

Additionally, the Town of Coupeville is currently managing two, concurrent Department of Ecology grants related to stormwater activities and water re-use. The on-going and successful project management of DOE resources is the single best indicator current readiness to proceed with this new DOE project. The Town knows the funding and reporting processes needed to manage a project of this scope and has a ready-made network of DOE and other technical advisors in this area of study. In the past two years the Town of Coupeville has researched, applied for and is successfully managing several challenging DOE grants and is ready to do the same high quality work on this project. Few communities in Washington State have as well integrated team of water quantity players as does WRIA 6 and particularly Central Whidbey Island.

As described above investments of time and money have been made in the local area to become ready to implement this project. The project is fully consistent with Island County's Watershed Management Plan. The Town of Coupeville discussed this type of project mutiple times in the past year at Reclaimed Water Steering Committee meetings. It has been reported in the local press and has been reviewed during other local public forums. The project team has also made use of the local review process by participating in the Whidbey Island Conservation District hosted Low Impact Development Summits of 2007. The project was presented and discussed at Island County's Marine Resource Committee meetings in 2008. Finally, this project was also presented, discussed and approved unanimously at a recent Island County's Water Resources Advisory Committee meeting.

Partnerships on this project include the Whidbey Island Conservation District, Island County's Health, and Planning Departments, Ebey's Landing National Historic Reserve, Island County's Water Resource Advisory Committee as well as Marine Resource Committee. Agreements in place include matching resource commitments from the Town of Coupeville and Island County Health Department. These investments demonstrate community and project team commitment to start the project today and follow it through for the long term. Project partners and matching contributors share common values and vision for water re-use on water short Ebey's Prairie and a healthier Puget Sound.

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Does the project proponent own the land for the proposed project? If not, does the proponent have documented access to the right of way or owns an easement to the property proposed (please attach appropriate documentation including title report as applicable).

The land involved in the proposed feasibility study involves multiple entities, including the Town of Coupeville, the National Park Service, Island County and private land owners. All land owners have been approached about this project and are support of conducting the feasibility assessment. Future issues such as documentation, including title report, will become applicable during this feasibility assessment and future project phases.

Design/Engineering Status:

Pre-planning (pre - permitting)	☐	Status:
Pre-design (design reports) (10%)	☐	Status:
Schematic design (30%)	☐	Status:
Design development (75%)	☐	Status:
Construction documents (95%)	☐	Status:
Bid documents (ready for bid)	☐	Status:

Permit Status

SEPA	☐	Status:
401	☐	Status:
Dept. of Fish and Wildlife consultation	☐	Status:
Storage and/or Secondary Use Permit	☐	Status:
Other: (_____)	☐	Status:
Other:(_____)	☐	Status:
Other: (_____)	☐	Status:

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9. Signatures (send this sheet electronically and by original signature in surface mail)

I certify that the information above is true and accurate to the best of my knowledge.

I understand that in order to process my application, I am hereby granting staff from the Department of Ecology access to the above site(s) for inspection and monitoring purposes.

If assisted in the preparation of the above application, I understand that all responsibility for the accuracy of the information rests with me.

I also understand that I may rescind this application at any time prior to signing the Agreement with no other obligations or requirements.

SIGNED// _____ 12/30/2008
Nancy Conard, Mayor, Town of Coupeville
(Applicant/ Grant Recipient) (Date)

Not Applicable (Feasibility Study) ____/____/____
(Water Right Holder) (Date)

Not Applicable (Feasibility Study) ____/____/____
(Land Owner(s) of Existing Place of Use) (Date)

For More Information Contact:
Dave Burdick
Voice: (360) 407-6094
Email: dbur461@ecy.wa.gov
Web: http://www.ecy.wa.gov/watershed/Index.html

If you need this document in an alternate format, please call the Water Resources Program at 360-407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

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Section 3
Funding Resources Guide

This section is provided as a resource guide to inform planning groups of other potential sources of watershed plan implementation funding.

The list may not be complete and Ecology cannot guarantee these internet sites or links will continue to work during the grant application period.

The sites and links were all functional in August, 2008. If you have any questions about each site's content and funding sources, please attempt to contact the organization on your own.

If any links are broken or not working please send an e-mail message to **bzac461@ecy.wa.gov.**

State Funds

- Agricultural Water Supply Grant Program
- Centennial Clean Water Fund, State Revolving Fund and Clean Water Act Sect. 319
- Coastal Protection Fund (Husseman Account) [No website: An ECY internal fund to seed local projects, please contact the Watershed Planning Lead assigned to your Watershed Planning Group)
- Columbia River Basin Water Management Grant Program
- Community Development Block Grants (CTED)
- Department of Agriculture Grant Programs
- Public Works Trust Fund and State Drinking Water Revolving Fund (CTED and DOH)
- EPA Targeted Watersheds Program
- Irrigation Efficiency Grants Program (Conservation Commission)
- On-Site Septic System Repair Grant Program (Puget Sound only)
- Reclaimed Water Grants Program
- Salmon Recovery Funding Board Grants (WDFW)
- Water Acquisition Program
- Water Metering Program (cost share with Conservation Districts)

Federal Funds

- **EPA Targeted Watersheds (on hold as of Sep 2008, not funded)**

End of Document

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State of Washington

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Nancy Conard _____ 12 / 30 / 08

Nancy Conard, Mayor, Town of Coupeville (Date)
(Applicant/ Grant Recipient)

Not Applicable (Feasibility Assessment) ____/____/____

(Water Right Holder) (Date)

Not Applicable (Feasibility Assessment) ____/____/____

(Land Owner(s) of Existing Place of Use) (Date)

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Dave –
Here is the
Mayor's signature
page for the
"Central Whidbey
ASR Feasibility
Study" grant
Application.
Thanks,
Rex Pinter